



Contact characteristics			
Number of poles	Nr.		3
Rated insulation voltage $U_i$ IEC/EN	V		1000
Rated impulse withstand voltage $U_{imp}$	kV		8
Operational frequency	min	Hz	25
	max	Hz	400
IEC Conventional free air thermal current $I_{th} \leq 40^\circ\text{C}$	A		70
Operational current $I_e$	AC-1 ( $\leq 40^\circ\text{C}$ )	A	70
	AC-1 ( $\leq 55^\circ\text{C}$ )	A	60
	AC-1 ( $\leq 70^\circ\text{C}$ )	A	50
	AC-3 ( $\leq 440\text{V} \leq 55^\circ\text{C}$ )	A	40
	AC-4 (400V)	A	24
Rated operational power AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	kW	11
	400V	kW	18.5
	415V	kW	22
	440V	kW	22
	500V	kW	22
	690V	kW	30
	1000V	kW	18.5
Rated operational current AC-3 ( $T \leq 55^\circ\text{C}$ )	230V	A	40
	400V	A	40
	415V	A	40
	440V	A	40
	500V	A	33
	690V	A	32
	1000V	A	21
Rated operational power AC-1 ( $T \leq 40^\circ\text{C}$ )	230V	kW	26
	400V	kW	46
	500V	kW	58
	690V	kW	79
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 1 poles in series	$\leq 24\text{V}$	A	40
	48V	A	35
	75V	A	30
	110V	A	8
	220V	A	–
IEC max current $I_e$ in DC1 with $L/R \leq 1\text{ms}$ with 2 poles in series	$\leq 24\text{V}$	A	48
	48V	A	48
	75V	A	45

	110V	A	42
	220V	A	5
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 3 poles in series			
	≤24V	A	48
	48V	A	48
	75V	A	48
	110V	A	44
	220V	A	56
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IEC max current I <sub>e</sub> in DC1 with L/R ≤ 1ms with 4 poles in series			
	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 1 poles in series			
	≤24V	A	27
	48V	A	23
	75V	A	19
	110V	A	3
	220V	A	–
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 2 poles in series			
	≤24V	A	32
	48V	A	30
	75V	A	27
	110V	A	22
	220V	A	5
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 3 poles in series			
	≤24V	A	40
	48V	A	40
	75V	A	38
	110V	A	27
	220V	A	32
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IEC max current I <sub>e</sub> in DC3-DC5 with L/R ≤ 15ms with 4 poles in series			
	≤24V	A	–
	48V	A	–
	75V	A	–
	110V	A	–
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Short-time allowable current for 10s (IEC/EN60947-1)		A	400
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Protection fuse			
	gG (IEC)	A	100
	aM (IEC)	A	50
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Making capacity (RMS value)		A	400
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Breaking capacity at voltage			
	440V	A	320
	500V	A	265
	690V	A	256
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Resistance per pole (average value)		mΩ	0.8
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Power dissipation per pole (average value)			
	I <sub>th</sub>	W	3.9
	AC-3	W	1.3
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Tightening torque for terminals			
	min	Nm	4
	max	Nm	5
	min	I <sub>bin</sub>	2.95

		max	I <sub>bin</sub>	3.69			
Tightening torque for coil terminal		min	Nm	0.8			
		max	Nm	1			
		min	I <sub>bin</sub>	0.8			
		max	I <sub>bin</sub>	0.74			
			Nr.	2			
Max number of wires simultaneously connectable			Nr.	2			
Conductor section	AWG/Kcmil						
		max		2			
Flexible w/o lug conductor section		min	mm <sup>2</sup>	1.5			
		max	mm <sup>2</sup>	35			
	Flexible c/w lug conductor section		min	mm <sup>2</sup>	1.5		
		max	mm <sup>2</sup>	35			
Power terminal protection according to IEC/EN 60529				IP20 front			
<b>Mechanical features</b>							
Operating position		normal		Vertical plan			
		allowable		±30°			
Fixing				Screw / DIN rail 35mm			
Weight			g	1060			
<b>Operations</b>							
Mechanical life			cycles	15000000			
Electrical life			cycles	1500000			
<b>Safety related data</b>							
Performance level B10d according to EN/ISO 13489-1		rated load	cycles	1500000			
		mechanical load	cycles	15000000			
EMC compatibility				yes			
<b>AC coil operating</b>							
Rated AC voltage at 50/60Hz, 60Hz		min	V	60			
		max	V	110			
AC operating voltage	of 50/60Hz coil powered at 50Hz	pick-up	min	%Us	80 Us min		
			max	%Us	110 Us max		
		drop-out	max	%Us	≤70 Us min		
			of 50/60Hz coil powered at 60Hz	pick-up	min	%Us	80 Us min
					max	%Us	110 Us max
	drop-out	max		%Us	≤70 Us min		
		AC average coil consumption at 20°C		of 50/60Hz coil powered at 50Hz	in-rush	VA	90
					holding	VA	2.7

of 50/60Hz coil powered at 60Hz			
	in-rush	VA	90
	holding	VA	2.7
of 60Hz coil powered at 60Hz			
	in-rush	VA	90
	holding	VA	2.7
Dissipation at holding $\leq 20^{\circ}\text{C}$ 50Hz		W	1...2.5
<b>DC coil operating</b>			
DC rated control voltage			
	min	V	60
	max	V	110
max			
DC operating voltage			
pick-up			
	min	%Us	80 Us min
	max	%Us	110 Us max
drop-out			
	max	%Us	$\leq 70$ Us min
Average coil consumption $\leq 20^{\circ}\text{C}$			
	in-rush	W	67
	holding	W	1.3
<b>Max cycles frequency</b>			
Mechanical operation		cycles/h	1500
<b>Operating times</b>			
Average time for Us control			
in AC			
Closing NO			
	min	ms	12
	max	ms	28
Opening NO			
	min	ms	8
	max	ms	22
in DC			
Closing NO			
	min	ms	40
	max	ms	85
Opening NO			
	min	ms	20
	max	ms	55
<b>UL technical data</b>			
Rated operational voltage AC (UL)		V	600
Full-load current (FLA) for three-phase AC motor			
	at 480V	A	40
	at 600V	A	32
Yielded mechanical performance			
for single-phase AC motor			
	110/120V	HP	3
	230V	HP	7.5
for three-phase AC motor			
	200/208V	HP	10
	220/240V	HP	15
	460/480V	HP	30
	575/600V	HP	30

**General USE**

Contactor	AC current	A	70
Short-circuit protection fuse, 600V High fault	Short circuit current	kA	100
	Fuse rating	A	150
	Fuse class		J
Standard fault	Short circuit current	kA	5
	Fuse rating	A	150
	Fuse class		RK5

**Ambient conditions**

Temperature

Operating temperature

min	°C	-40
max	°C	70

Storage temperature

min	°C	-50
max	°C	80

Max altitude

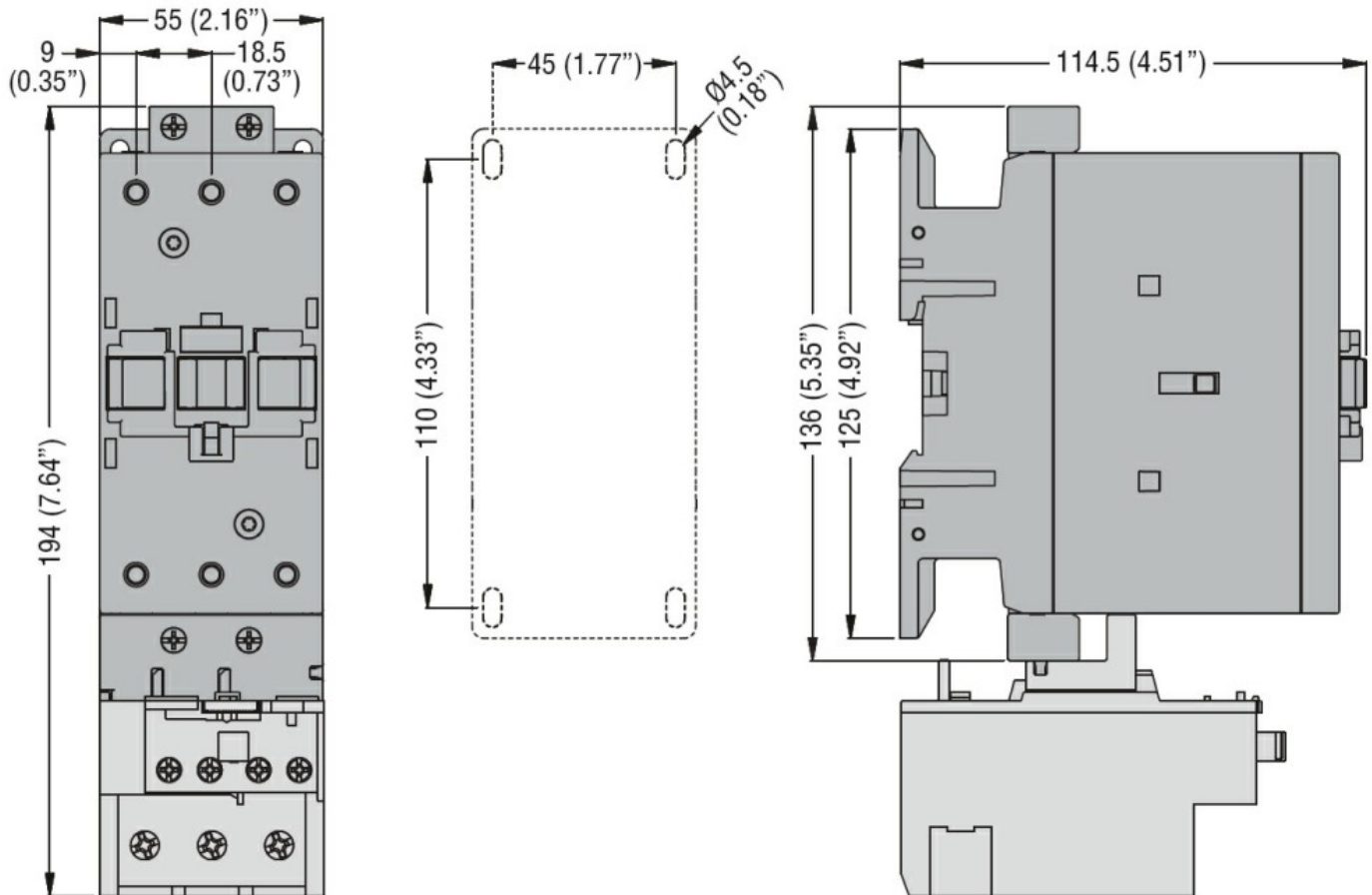
m	3000
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**Resistance & Protection**

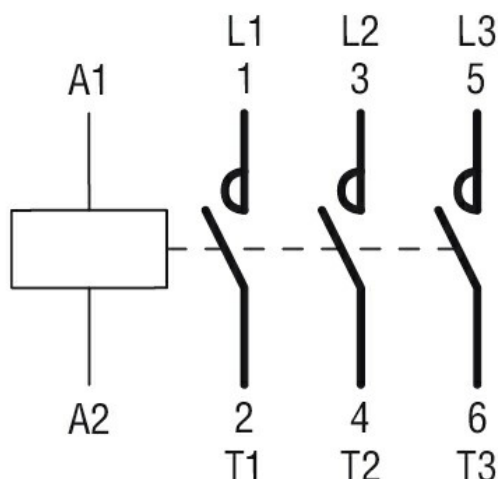
Pollution degree

3

**Dimensions**



**Wiring diagrams**



### Certifications and compliance

#### Compliance

CSA C22.2 n° 60947-1

CSA C22.2 n° 60947-4-1

IEC/EN 60335-2-89

IEC/EN/BS 60947-1

IEC/EN/BS 60947-4-1

UL 60947-1

UL 60947-4-1

#### Certificates

CCC

CSA C22.2 n. 60335-2-40:22 LZGH A2L

CSA C22.2 No. 60335-2-89:21 LZGH A2L

cULus

UL 60335-2-40 LZGH A2L

UL 60335-2-89 LZGH A2L

### ETIM classification

ETIM 8.0

EC000066 -  
Power contactor,  
AC switching